# Terraform Template Documentation - LAMP Stack

# **Prerequisites**

Before using this Terraform template to deploy a LAMP stack on AWS, make sure you have the following:

AWS Account: You need an active AWS account to deploy resources. Terraform Installed: Ensure you have Terraform installed on your local machine.

variables.tf: This file defines variables that you can customize according to your requirements, such as VPC CIDR blocks, subnet configurations, and other parameters.

#### main

The main.tf file contains the main configuration for your infrastructure. It includes resources like Load Balancer, EC2 Instance, MySQL Database, and networking components. Adjust these configurations based on your needs.

#### network

In this file, you'll find configurations for the VPC, Internet Gateway, subnets, and routing tables. Modify these settings to align with your network architecture.

#### Usage

- 1. Copy all code files
- 2. Customization
- 3. terraform init
- 4. Review the Execution Plan:
- 5. terraform plan
- 6. Apply the Changes:
- 7. terraform apply

if you run in a issue try: terraform apply -lock=false

#### variables

to customize variables, change the configurations in the variables.tf to meet your specific requirements.

## userdata

This file includes a bash script with will launch with the deployment of the EC2. This will install the software: mySQL, Python, Apache and the SSM manager. Copy this file over on your pc and change directory in the variables.tf

#### **State Management**

This Terraform template uses AWS S3 and DynamoDB to manage the state. Ensure proper AWS credentials are configured for state storage.

### **Notes**

AWS credentials should be configured on your machine. Exercise caution when making changes using Terraform to avoid unintended modifications.